

Amendments to the Claims

1. (Currently Amended) A method for categorizing voice samples of a person being tested for near term suicidal risk ~~as a prelude to such testing~~ and thereafter determining jitter variations in fundamental frequency of the voice of a person being evaluated for near-term suicidal risk,

comprising the steps of:

- A. setting an analysis window to a selected sample set length of 512, where the particular sample is identified as the Kth sample;
- B. reading the Kth sample;
- C. computing wavelet transforms of such Kth sample for scales in powers of 2 running from the 1st power to the 5th;
- D. storing the signal energy value as computed for each scale;
- E. checking to determine whether the Kth sample is the last of the sample set and if additional samples remain, repeating steps “b” through “d”;
- F. setting the median energy distribution at the scale for 2 to the 4th power as a threshold;
- G. successively for each sample comparing the energy across the scales;
- H. if the maximum energy is at the scale for 2 to the 1st power, identifying the segment as unvoiced and proceeding to the next succeeding sample;
- I. if the segment maximum energy is at one of the scales of 2 to the 2nd power through 2 to the 5th power, identifying the segment as being either voiced or silence; and
- J. if the segment energy at the 2 to the 4th power scale exceeds the threshold, classifying the segment as voiced; otherwise classifying it as silence;
- K. identifying said segments classified as voiced as being suitable for testing of the

person for near-term suicidal risk;

L. selecting two consecutive segments voiced segments and generating separate pulse trains in which the heights of the pulses correspond to amplitude of positive and negative peaks of the wavelet transformed speech signal;

M. thresholding the segments of the vocal signal to discard peaks corresponding to possible unvoiced samples;

N. computing a fundamental period over the entirety of each of the two segments by:

i. finding the location of the first peak of the autocorrelation of the smoothed spectrum to the right of the zero lag component;

ii. detecting a starting pulse exhibiting the property of being larger than both the pulse immediately preceding and immediately following such pulse and being greater than 50% of the global maximum of the pulse sequence;

iii. locating following prominent pulses as detected in the neighborhood of expected locations determined by the peak of the autocorrelation sequence;

iv. selecting, between two sequences of positive and negative peaks, the peak having the largest magnitude; and

v. taking the difference between two consecutive prominent pulses as the duration for the glottal cycle; and

O. determining period-to-period fluctuation of fundamental frequency by measuring the difference between fundamental frequencies of two consecutive segments; and

P. comparing the measured difference between fundamental frequencies of two consecutive segments for such person to variations in fundamental frequency for persons

known not to be at near-term suicidal risk and providing a signal to a clinician in the event such comparison finds the person to be at near-term risk for suicide.

2-8. (Canceled)